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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/695,291 | 10/28/2003 | Hua Tang | TPIP021 | 3947 |

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| EXAMINER | |
|---|---|
| HUYNH, CARLIC K | |
| **ART UNIT** | **PAPER NUMBER** |
| 1617 | |

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|---|---|---|
| 3 MONTHS | 04/12/2007 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/695,291 | TANG ET AL. | |
| | Examiner | Art Unit | |
| | Carlic K. Huynh | 1617 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *19 December 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) 9 is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8 and 10-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *See Continuation Sheet*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :13 May 2004, 2 August 2004, and 25 January 2007.

## DETAILED ACTION

### *Status of the Claims*

1. Claims 1-17 are pending in the application, with claim 9 having been withdrawn from consideration, in response to the restriction requirement submitted on November 15, 2006. Accordingly, claims 1-8 and 10-17 are being examined on the merits herein.

### *Election/Restrictions*

2. Applicant's election without traverse of the claims of Group I, namely claims 1-8 and 10-17, in the reply filed on December 19, 2006 is acknowledged.

Claim 9 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on December 19, 2006.

3. Applicant's election without traverse of the species of (1) cysteine as an excipient; and (2) lidocaine as a local anesthetic, in the reply filed on December 19, 2006 is acknowledged.

The examiner hereby withdraws the election of species requirement of (1) cysteine as an excipient and (2) lidocaine as a local anesthetic.

The restriction requirement, however, is still deemed proper and is made FINAL.

### *Information Disclosure Statement*

The Information Disclosure Statement submitted on May 13, 2004, August 2, 2004, and January 25, 2007 is acknowledged.

***Specification***

4. The use of the trademark Diprivan®, Rapinovet™, PropoFlo™, Brij®, Tween®, Cremophor®, and Intralipid® has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 17 is rejected under 35 U.S.C. 102(e) as being anticipated by Thompson et al. (US 7,034,013).

Thompson et al. teach an injectable formulation of propofol containing a number of excipients such as corn oil, olive oil, and glycerol, and the preservative sodium ascorbate (abstract; column 19, lines 56-58 and 63; and column 20, lines 58-59).

For these reasons the claimed subject matter is deemed to fail to patentably distinguish over the state of the art as represented by the cited reference. The claims are therefore properly rejected under 35 U.S.C. 102 (e).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-8 and 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mirejovsky et al. (US 6,147,122) in view of Busta et al. ("Chemical Food Preservatives," pp 656-694, in *Disinfection, Sterilization, and Preservation*, third edition, Ed SS. Block, 1983, Pub. Lea and Febiger, Philadelphia, USA), Bulet et al. (Developmental and Comparative Immunology, 1999, vol. 23, pp 329-344), and Mishra et al. (US 7,097,849).

Mirejovsky et al. teach a propofol composition containing sulfite as an anti-microbial agent (abstract).

The propofol composition of Mirejovsky et al. is prepared by injection (column 12, line 43). Propofol is 1% by weight of the composition and is soluble in the aqueous phase (column 4, line 35; and column 3, line 27). The propofol composition also contains a water-immiscible solvent, such as vegetable oil, at 10% weight, a surfactant, such as egg or soy phosphatides, at 1.2% weight, and is formulated with pH in the range of about 4.5 to about 6.4 (column 4, lines 32-35, 48-50, 59, and 63-65; column 5, lines 19-20; and column 12, line 47).

The anti-microbial agent of the propofol composition is about 0.0075% to about 0.66% weight (column 4, lines 12-14). The anti-microbial agent is in an amount sufficient to prevent the growth, or prevent no more than a 10-fold increase in growth, of each of *S. aureus* (ATCC 6583), *E. coli* (ATCC 8739), *P. aeruginosa* (ATCC 9027), and *C. albicans* (ATCC 10231) for at least 24 hours wherein each organism is added at 50-200 colony forming units and incubated at 30-35$^0$C (column 8, 3. Microbiological activity; and column 12, lines 25-38).

Mirejovsky et al. do not teach cysteine as the anti-microbial agent and a local anesthetic.

Although the anti-microbial agent used is a sulfite as opposed to cysteine as disclosed in the instant application, Busta et al. teach that sulfites exert their anti-microbial effects by interaction with structural proteins (p. 671) and Bulet et al. teach that insect defensins, which are anti-bacterial peptides containing cysteine, exert their anti-microbial effects by interaction with membrane proteins to disrupt the membrane permeability barrier (p. 330 and 332).

Mishra et al. teach a propofol composition comprising an anti-microbial agent and a local or long lasting anesthetic, such as lidocaine (column 1, line 7; and column 5, lines 47-51).

To a person of skill in the art at the time of the invention, it would have been obvious to employ the propofol composition of Mirejovsky et al. to contain an anti-microbial agent and a local anesthetic because the propofol compositions of Busta et al., Bulet et al., and Mishra et al. contain an anti-microbial agent and a local anesthetic and according to Busta et al. and Bulet et al., sulfite and cysteine exert their anti-microbial effects by interacting with membrane proteins and according to Mishra et al., propofol compositions can contain an additional local or long acting anesthetic such as lidocaine.

The motivation to combine the propofol composition of Mirejovsky et al. to the propofol compositions of Busta et al., Bulet et al., and Mishra et al. is that the propofol compositions of Busta et al. and Bulet et al. contain either sulfite or cysteine, which exert their anti-microbial effects by interacting with membrane proteins, and the propofol composition of Mishra et al., contain an additional local or long acting anesthetic such as lidocaine.

***Double Patenting***

**Obviousness-Type**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1, 11, and 17 are provisionally rejected on the grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 3, 18, and 30 of copending Application Zhang et al. (US 2004/0220283), claims 1, 49, 66, 71-72, 75, and 77 of copending Application Zhang et al. (US 2004/0265388), and claim 1 of copending Application Zhang et al.

(US 2005/0027019) in view of Mirejovsky et al. (US 6,147,122), Busta et al. ("Chemical Food Preservatives," pp 656-694, in *Disinfection, Sterilization, and Preservation*, third edition, Ed SS. Block, 1983, Pub. Lea and Febiger, Philadelphia, USA), Bulet et al. (Developmental and Comparative Immunology, 1999, vol. 23, pp 329-344), and Mishra et al. (US 7,097,849) as applied to claims 1-8 and 10-16 above, and in further view of Thompson et al. (US 7,034,013) as applied to claim 17 above.

Claims 3, 18, and 30 of copending Application Zhang et al. (US 2004/0220283) and claim 1 of copending Application Zhang et al. (US 2005/0027019) are directed to a composition comprising propofol, which meets the limitations of the instant claims 1, 11 and 17.

Claims 1, 49, 66, 71-72, 75, and 77 of copending Application Zhang et al. (US 2004/0265388) are directed to a composition consisting essentially of propofol, wateer and up to 15% excipents. "Consisting essentially of" will be construed as equivalent to "comprising." See, e.g., PPG, 156 F.3d at 1355, 48 USPQ2d at 1355. Thus, claims 1, 49, 66, 71-72, 75, and 77 of copending Application Zhang et al. (US 2004/0265388) meets the limitations of the instant claims 1, 11 and 17.

This is a provisional double patenting rejection since the conflicting claims have not been patented.

***Conclusion***

8. No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlic K. Huynh whose telephone number is 571-272-5574. The examiner can normally be reached on Monday to Friday, 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ckh

SREENI PADMANABHAN
SUPERVISORY PATENT EXAMINER